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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

PALABRICA, RICARDO J

ART UNIT PAPER NUMBER

3663

DATE MAILED: 01/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/723,396	Applicant(s) LIN, PING-WHA	
	Examiner Rick Palabrica	Art Unit 3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 14, 16 and 18-32 is/are pending in the application.
- 4a) Of the above claim(s) 10-12, 14, 16, 18-20, 27, 31 and 32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 21-26 and 28-30 is/are rejected.
- 7) ☒ Claim(s) 1 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>4/8/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's election without traverse of Group I (process), and species A (air), C (flame generator) and G (NO_x), with claims 1-9, 21-26 and 28-30 readable of the elected invention, in the reply filed on 12/1/05, is acknowledged.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Specification

2. The specification is objected to under 35 U.S.C. 112, first paragraph, as failing to provide an adequate written description of the invention and as failing to adequately teach how to make and/or use the invention, i.e. failing to provide an enabling disclosure.

The invention is directed to producing electrical energy by "cold nuclear fusion" from a gas stream containing a hydrogen source (e.g., see the Specification at page 7, lines 5+, page 15, line 5, page 18, page 32, lines 13+, etc).

As set forth more fully below, the disclosure does not contain reputable evidence that is sufficient to support any allegations or claims that the invention produces "exothermic nuclear reactions" or "excess heat", that any allegations or claims of the

production of excess heat due to nuclear and/or chemical reactions are valid and reproducible, nor that the invention as disclosed is capable of operating as indicated and capable of providing the intended output.

This concept of producing nuclear reactions and excess heat by “cold fusion” was in general, publicly announced by Fleischmann and Pons (hereinafter referred to as “F and P”) on March 23, 1989 (see the 3/24/89 article by D. Braaten). Applicant’s invention is thus, at most, no more than a variation of the cold fusion concept or system set forth by F and P. Applicant’s variation from F and P is the use of a molten electrolyte, instead of an aqueous electrolyte, in an electrochemical cell system.

In what follows, the Examiner is guided by the U.S. Federal Court of Appeals decision, *In re Dash*, No. 04-1145, 2004 WL 2829039 (Fed. Cir. Dec.10, 2004). The Dash patent application discloses a method for generating heat energy using an electrolytic cell having a palladium cathode and an inert anode. The electrolyte used in the cell principally contains heavy water. Dash reported measurements of heat produced by his apparatus.

The Examiner of the Dash application rejected it on enablement and utility grounds. The Board sustained the Dash Examiner’s rejection and the Court affirmed the Board’s decision (see *Dash*, *3).

The Court construed the Dash claims to require the production of excess heat energy and to be directed to a method of achieving “cold fusion”. The Court stated, “[g]iven the scientific community’s considerable doubt regarding the utility of “cold fusion” processes, we hold that the examiner established a prima facie case of lack of utility and enablement.” (see *Dash*, C. “Analysis”).

In response to Dash’s argument that the evidence that supported the Examiner’s prima facie case is invalid because it does not concern the invention as claimed and

because the documents cited are anecdotal or not peer reviewed, the Court said, that it knew of “no rule that forbids the Examiner from relying on related technology, anecdotal information, or sources that are not peer reviewed to establish inoperability.” The Court further stated that “[w]hile it may be ideal for the Examiner to offer peer-reviewed data on precisely the claimed information to establish such a case, such extreme certainty is not required.” (see *Dash*, *3).

As set forth more fully below, this “cold fusion” concept of producing nuclear reactions, including energy generation (known in the art as “excess heat”), is still no more than just an unproven concept.

Subsequent to the announcement of this cold fusion concept by F and P, many laboratories have attempted to confirm the results of F and P.

The results of these attempts at confirmation were primarily negative and even of the few initial positive results, these were generally either retracted or shown to be in error by subsequent experimenters (e.g., see the article by Stipp in the Wall Street Journal and the article by Browne in The New York Times (particularly page A22)).

The general consensus by those skilled in the art and working at these various laboratories is that the assertions by F and P were based on experimental errors (e.g., see The New York Times article by Browne, Kreysa et al., Lewis et al., Hilts, Horanyi, Ohashi et al., MisKelly et al. and Chapline).

Note for example, that Kreysa et al. al on page 440 state that , “We have repeated the heat balance measurements more than 10 times and never found a significant heat excess within the accuracy limits of $\pm 5\%$.” Kreysa et al. also refer to various possible sources of error, which could lead to erroneous conclusion that nuclear reactions and excess heat were produced.

Hilts states that the MIT experiments failed to produce any of the excess heat reported by the Utah group.

Lewis et al. state in the summary on page 525 that they found no evidence of excess enthalpy in their experiments and, they refer to various possible sources of error which could lead to the erroneous conclusion that nuclear reactions and excess heat were produced (note pages 528-530).

Both Hilts and Lewis et al. indicate that in any determination of excess heat, one must determine the total amount of energy produced (as heat and chemical energy) integrated over the whole period of cell operation, versus the total energy input.

It was also the general consensus by those skilled in the art and working at these various laboratories that there is no reputable evidence of neutron, gamma ray, tritium or helium production to support the allegation or claim that nuclear reactions are taking place, nor is there any reputable evidence to support the allegation or claim of excess heat production. See for example (in addition to the above listed references) page A14 of the 7/13/89 edition of The Washington Post, Cooke, Alber et al., Faller et al, Cribier et al., Hajdas et al., Shani et al., Ziegler et al., Price et al., Schrieder et al., and pages A3 of the 3/29/90 edition of The Washington Post.

Of particular interest is page A3 of the 3/29/90 edition of The Washington Post that refers to the negative findings of a physicist who had tested Pon's own cold fusion apparatus for nuclear output (for a more complete analysis of said "negative findings", note the article by Salamon et al.). Also of interest in this respect is the Cooke reference which, on pages 4 and 5, refers to the attempts at Harwell to obtain "cold fusion" and that Fleischmann (of F and P) had requested help from Harwell in verifying the cold fusion claims. Said page 5 also indicates that data was collected in Frascati-type (i.e. gaseous) experiments.

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The last paragraph on said page 5 states:

“After three months of around-the-clock work at a cost of over a half million dollars, the project was terminated on June 15. This program is believed to be one of the most comprehensive worldwide with as many as 30 cells operating at a time and over 100 different experiments performed. The final results of this monumental effort in the words of the official press release was, “ In none of these experiments was there any evidence of fusion taking place under electrochemical conditions”. It should also be added that there was no evidence of excess heat generated by any of their cells.” (Underlining added).

Applicant's specification contains assumptions and speculation as to how and in what manner, his invention will operate. However, applicant has presented no reputable factual evidence to support his assumptions and speculation regarding a reproducible, sustainable excess heat (cold fusion) and low temperature reaction reactions.

As discussed below, Applicant makes conclusions that nuclear reactions are occurring in his system, which conclusions are neither unsubstantiated by unbiased sources nor based on any nuclear measurements. In some instances, Applicant himself admits that he is unsure that nuclear reactions are present, e.g., by such statement as, “rapid increase of the temperature of the gas flow is apparently due to nuclear reactions” (see page 26 of the specification).

Note in this respect that the examiner (as set forth above) has presented documentary evidence that there are no operative cold fusion systems that actually produce excess heat, neutrons, or any other nuclear reaction product.

The disclosure is thus insufficient and non-enabling as to exactly what all is necessary to actually present a reproducible, sustainable excess heat (cold fusion) and low temperature nuclear reaction, and, as to what would cause such reactions to actually take place in the applicant's system.

On page 5, lines 1+ (also page 22, last paragraph, and page 23, last sentence), Applicant describes pilot plant studies during the course of the claimed invention, which included a vertically fired combustor (VFC) through which air was continuously forced. During a post idle operation, when the burners were turned off so that no external heat was added to the system, it was observed that the temperature of the flowing air consistently rose. Applicant asserts that “[t]his air flow temperature increase of such large magnitude and long duration following the initial input of heat from the burners clearly indicates that nuclear reactions were present in VFC.” Underlining provided. There is neither an adequate description nor enabling disclosure as to how and in what manner Applicant could categorically conclude that such temperature increase was due to nuclear reactions. For example, what specific nuclear measurements (e.g., detection and measurement of nuclear particles and their energies) were performed to provide a basis for the conclusion.

On page 6, lines 2+, Applicant asserts that, “[i]t was determined that the water vapor in the air was initially converted to hydrogen and oxygen by the rapid heating, which further lead to nuclear reactions, involving transformation of hydrogen ions into protons.” Underlining provided. There is neither an adequate description nor enabling disclosure as to how and in what manner Applicant established that: a) protons were generated; and b) if indeed such protons were generated, that they came from nuclear transformation of hydrogen ions.

On page 7, lines 2+, Applicant asserts that, “[b]y applying high time rate of temperature increase to a gas flow, nuclear reactions of the fluid can be promoted, and cold nuclear fusion becomes a reality.” Underlining provided. There is neither an adequate description nor enabling disclosure as to how and in what manner such the alleged “nuclear reactions” and “cold nuclear fusion” were established. For example,

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what specific nuclear measurements were performed to provide a basis for this conclusion.

On page 9, last paragraph, Applicant asserts, "... net heat is immediately transformed to enthalpy, which is the sum of the internal energy of its components and pressure of the gas." Underlining provided. It is a notorious scientific fact that enthalpy is the sum of the internal energy of system components and the *product of pressure and volume*. There is neither an adequate description nor enabling disclosure as to how and in what manner equations 3-5 can properly provide a measure of the net heat of the system when that volume of the gas is not considered.

On page 15, lines 1+, On page 7, lines 2+, Applicant asserts:

"So it can be concluded that when a mixed material is subjected to a heat flux rate, the total heat flux rate is distributed among molecules, atoms or nuclei, and electrons. The average energy in each particle group increases with time, and when the energy of particle (molecule, atom, nuclei or electron) reaches its activation level, reaction takes place. The reaction can be atom-splitting reaction, a molecular built-up reaction or a nuclear reaction such as cold fusion."

There is neither an adequate description nor enabling disclosure as to: a) how and in what manner said heat flux rate is distributed among the molecules, atoms or nuclei, and electrons, e.g., what percentage goes to each one; b) what specific nuclear measurements were performed to provide a basis for the conclusion that atom-splitting reaction or cold fusion is achieved.

On page 23, last two lines, Applicant asserts, "[s]uch a high magnitude of temperature increase verifies that nuclear reactions played an important role." Underlining provided. There is neither an adequate description nor enabling disclosure as to how and in what manner Applicant is able to conclude that the high magnitude of temperature increase is categorically due to nuclear reactions. Also, there is no

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disclosure of what the term, "important role" encompasses (e.g., contribution of more than 50%, 70%, 90% or what?).

On page 26, lines 12+, Applicant asserts, "[t]he continuously rapid increase of the temperature of the gas flow is apparently due to nuclear reactions." Underlining provided. (Examiner's note: This statement is a clear admission by the Applicant that he is unsure whether the observed condition is due to nuclear reactions). There is neither an adequate description nor enabling disclosure as to whether the increase in gas temperature was verified to be due to nuclear reactions.

On page 32, lines 20+, Applicant asserts, "[t]he heat released from nuclear reaction enables the temperature to remain at a high level in the basic nuclear fusion unit 316 and induces further nuclear reactions in the incoming fresh air." Underlining provided. There is neither an adequate description nor enabling disclosure as to how and in what manner Applicant is able to conclude that: a) nuclear reaction is the source of heat that allows the temperature in unit 316 to remain at a high level; b) nuclear reactions are induced in the incoming fresh air, e.g., what measurements were performed to categorically determine that incoming fresh air is undergoing nuclear reactions?

On page 33, lines 6+, Applicant asserts, "[t]he heated gas passes through the heat reservoir, 315, where a large portion of the heat in the flow is retained, and the nuclear fusion reactions in the flowing gas due to rapid heating produce additional heat which enhances further nuclear reactions continuously and rapidly in the flow." Underlining provided. There is neither an adequate description nor enabling disclosure as to how and in what manner it was concluded that: a) a "large portion" of the heat is retained in the reservoir, and how this so-called large portion was determined; b) further nuclear reactions are continuously and rapidly being generated in the flow.

On page 37, lines 18+, Applicant asserts, “[t]he heat from nuclear fusion in the plasma flow is continuously transmitted out from the system by heat exchangers ...” There is neither an adequate description nor enabling disclosure as to how and in what manner it was concluded that nuclear fusion occurs in said plasma flow.

Applicant’s specification contains assumptions and speculation as to how and in what manner his invention will operate (i.e., the so-called Lin’s Theory of Flux on page 9+ of the Specification). Indeed, Applicant appears to be basing the operativeness of his invention on various approximations, estimations, assumptions, etc. set forth, for example, on said page 9+ of the Specification. It can be said that one could manipulate any number of approximations, estimations, and assumptions to come up with a result which would allegedly “work” in theory. However, Applicant has presented no reputable factual evidence to support his assumptions and speculation, that his invention is operative. The specific issues raised by the Examiner above is a clear example of lack of credible support for Applicant’s assumptions and speculation. Without reputable evidence to the contrary, the accepted scientific community theory is presumed correct. The disclosure is insufficient in failing to set forth the underlying assumptions for Applicant’s theory, as well as Applicant’s appraisal of the degree of validity of said assumptions.

The specification (see page 22+) appears to refer to tests or experiments wherein excess heat was generated after system shutdown, thereby allegedly attesting that nuclear fusion reactions occur. However, these indications or allegations are not sufficient to overcome the numerous teachings of skilled artisans (set forth above by the Examiner) that the allegations of attainment of said excess heat/nuclear fusion reactions in a cold fusion system (whether electrochemical, plasma, gaseous, etc.) are

reproducible or even obtainable. It is not clear from the information set forth in the Specification, that when all possible sources of error are taken into account, that the Applicant would be able to show positive results or that the alleged positive result do not fall within the limits of experimental error, or , that the alleged positive results are no more than a misinterpretation of experimental data. For example, the Examiner has cited several documents that deal with sources of error in cold fusion systems.

It is not seen that the specification discloses any particular structure, etc., which is unique to Applicant's system and which makes Applicant's cold fusion operative whereas the systems disclosed in the above referenced numerous teachings of skilled artisans, were not operative.

There is therefore no reputable evidence of record to support the assumption that useful amounts of excess energy/fusion reactions, etc. will be produced, such that the invention would find use in electricity production, as claimed, nor that the invention would operate as indicated.

There is neither an adequate description nor enabling disclosure of the parameters of a specific operative embodiment of the invention, including: the exact size, dimensions and composition (including degree of impurity and the impurities present) of each of the materials utilized in the operation of the claimed invent; initial fuel quantity/quality, etc.; assembly of apparatus (e.g., vacuum, shielding, etc.), calibration of instrumentation during and after each experiment, etc.

It is noted that the specification appears to set forth some parameters; however, the specification does not set forth an operative embodiment wherein the specific values of each of the parameters are recited.

The disclosure is insufficient in regard to the energy requires to initiate and produce excess heat production by fusion reactions, i.e., the energy required prior to

shutdown of the system. In addition, the specification is insufficient identifying the time required to produce said reactions.

As set forth above, the examiner has presented evidence showing that in cold fusion systems, the claims of excess heat (as well as of other nuclear reaction products), are not reproducible or even obtainable. It consequently must follow that the claims of excess heat or nuclear reactions are not reproducible or even obtainable with applicant's invention. While applicant may have set forth theoretical concepts, it is well known in the cold fusion field that theory and reality have a habit of not coinciding. There is no evidence to indicate that the applicant has so succeeded where others have failed, in arriving at an operative cold fusion system, i.e. that he has progressed his system beyond the point of an unproven theory or concept which still requires an undue amount of experimentation to enable the artisan to make and use the inventive system for its indicated purpose. This view is also considered supported by the failure to set forth a full example of the specific parameters of an operative embodiment. One cannot rely on the skill in the art for the selection of the proper quantitative values to present an operative cold fusion system, since those in the art do not know what would be these values. See Bank v. Rauland Corp., 64 U.S.P.Q. 93; In re Corneil et al., 145 U.S.P.Q. 697.

To reiterate briefly, the Examiner has presented evidence, that neither the situation of excess "heat" nor or other, nuclear reaction products, can reasonably be expected to be reproducible or even obtainable with the present invention.

There is no reputable evidence of record that would overcome the experimental showings in the above listed references, disproving this concept of "cold fusion".

Again, there is no evidence to indicate that the applicant has so succeeded where others have failed, in arriving at an operative system that produces nuclear fusion

or even "excess heat", i.e., that he has progressed his system beyond the point of an unproven theory of concept which still requires an undue amount of experimentation to enable the artisan to make and use the invention for its indicated purpose.

It is thus considered that the Examiner (for the reasons set forth above) has set forth a reasonable and sufficient basis for challenging the adequacy of the disclosure. The statute requires the applicant itself to inform, not to direct others to find out for themselves; *In re Gardner et al*, 166 U.S.P.Q. 138, *In re Scarborough*, 182 U.S.P.Q. 298. Note that the disclosure must enable a person skilled in the art to practice the invention without having to design structure not shown to be readily available in the art; *In re Hirsch*, 131 U.S.P.Q. 198.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-9, 21-26 and 28-30 are rejected under 35 U.S.C. 101 because the claimed invention as disclosed is inoperative and therefore lacks utility.

The reasons that the invention as disclosed is inoperative are the same as the reasons set forth in section 2 above as to why the specification is objected to and the reasons set forth in section 2 above are accordingly incorporated herein.

There is no reputable evidence of record to indicate the invention has been reduced to the point of providing in current available form, an operative cold fusion system. The invention is not considered as meeting the requirements of 35 U.S.C. 101 as being "useful". Note in this respect, Page A14 of the 7/13/89 edition of The

Washington Post which indicates that there is no convincing evidence that the “phenomena attributed to cold fusion would produce useful sources of energy”.

The Applicant at best, has set forth what may be considered a concept or an object of scientific research. However, it has been held that such does not present a utility within the meaning of 35 U.S.C. 101. See Brenner v. Manson, 148 U.S.P.Q. 689.

Additionally, it is well established that whereas here, the utility of the claimed invention is based upon allegations that border on the incredible or allegations that would not be readily accepted by a substantial portion of the scientific community, sufficient substantiating evidence of operability must be submitted by applicant. Note In re Houghton, 167 U.S.P.Q. 687 (CCPA 1970); In re Ferens, 163 U.S.P.Q. 609 (CCPA 1969); Puharich v. Brenner, 162 U.S.P.Q. 136 (CA DC 1969); In re Pottier, 152 U.S.P.Q. 407 (CCPA 1967); In re Ruskin, 148 U.S.P.Q. 221 (CCPA 1966); In re Citron, 139 U.S.P.Q. 516 (CCPA 1963); and In re Novak, 134 U.S.P.Q. 335 (CCPA 1962).

Claim Rejections - 35 USC § 112

4. Claims 1-9, 21-26 and 28-30 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The reasons that the invention as disclosed is not enabling are the same as the reasons set forth in section 2 above as to why the specification is objected to and the reasons set forth in section 2 above are accordingly incorporated herein.

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5. Claims 5, 9, 21, 22 and 28 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "rapid heating" in claim 5 is a relative term which renders the claim indefinite. The term "rapid" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Thus, the metes and bounds of the claim cannot be determined.

The same remark applies to claims 9, 21 and 22, which recite the term, "rapidly cooling".

The same remark applies to claim 28 that recites the term, "high rate of temperature increase."

Claim Objections

6. Claim 1 is objected to because of the following informalities: "reactor comprises" is repeated in line 3. Appropriate correction is required.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rick Palabrica whose telephone number is 571-272-6880. The examiner can normally be reached on 6:30-5:00, Mon-Thurs.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RJP
January 12, 2006

A handwritten signature in black ink, appearing to read "R. Palabrica". The signature is written in a cursive, flowing style.